

## **Remarks**

The various parts of the Office Action (and other matters, if any) are discussed below under appropriate headings.

### ***Telephone Interview***

Applicant would like to thank the Examiner for taking the time to conduct a telephone interview with applicant's representative. During the telephone interview, proposed amendments addressing the §101 and §112 rejections of the claims were discussed. These proposed amendments are reflected in the amendments to the claims presented herein.

### ***Claim Rejections - 35 USC § 112***

Claims 1-12, 26-39 and 42-45 stand rejected under 35 USC §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Withdrawal of the rejection is respectfully requested for at least the following reasons.

#### ***Claim 1***

The Examiner states that claim 1 does not appear to accomplish the stated goal of the preamble. More specifically, the claim allegedly lacks the step of modeling the effect of a molecular contaminant film on performance of an optical system.

Claim 1 has been amended herein to specifically recite that the estimated degradation in performance of the optical system is obtained from the convolving step. Support for this amendment can be found, for example, on page 9, lines 20-23 of the application as filed. Amended claim 1 is believed to address the Examiner's above concern.

Accordingly, withdrawal of the rejection of claim 1 is respectfully requested.

#### ***Claim 42***

Claim 42 stands rejected because the phrase "the at least one component" lacks antecedent basis. Further, the Examiner states that the method lacks the step of modeling the effect of a molecular contaminant film on performance of an optical system, as stated in the preamble of claim 42.

Claim 42 has been amended to change the term "component" to "compound" and thus the rejection with respect to lack of antecedent basis is moot. Further, claim 42 has been amended to recite the step of estimating the degradation in optical performance of the optical system due to the aggregate contaminant film. Support for this amendment can be found, for example, on page 8, lines 18-19 of the specification as filed. Amended claim 42 is believed to address the Examiner's above concern.

Accordingly, withdrawal of the rejection of claim 42 is respectfully requested.

***Claims 2-12, 36-39 and 43-45***

Claims 2-12, 36-39, and 43-45 were rejected for depending on a rejected base claim. Since the base claims (i.e., claims 1 and 42) have been amended herein to address the Examiner's concerns, the dependent claims also are believed to satisfy the requirements of 35 USC §112, second paragraph.

Accordingly, withdrawal of the rejection of claims 2-12, 36-39 and 43-45 is respectfully requested.

***Claim Rejections - 35 USC § 101***

Claims 1-12, 22-38 and 40-45 stand rejected under 35 USC §101 for being directed to non-statutory subject matter. Withdrawal of the rejection is respectfully requested for at least the following reasons.

The Examiner states that independent claims 1, 22 and 42 do not create a useful, tangible or concrete result. Further, the Examiner states that with the exception of claim 39, the dependent claims do not resolve the alleged deficiencies of the independent claims.

As noted above, claims 1 and 42 have been amended herein, and these amendments are believed to address the Examiner's concerns regarding statutory subject matter.

Further, claim 22 has been amended herein to recite that the estimated degradation in performance of the optical system is obtained from the convolving step, and the estimated degradation then is output by the computer system. Support for this amendment can be found, for example, on page 9, lines 20-23 and Figs. 18A and 18B of the application as filed. This amendment to claim 22 also is believed to address the Examiner's concerns regarding statutory subject matter.

Accordingly, withdrawal of the rejection of claims 1, 22 and 42 is respectfully requested.

The remaining claims were rejected for depending from a rejected based claim. Since it is believed that the base claims satisfy the requirements of sections 101 and 112, the rejection of the dependent claims is believed to be moot.

Accordingly, withdrawal of the rejection of claims 2-12, 23-38, 40-41 and 43-45 is respectfully requested.

### **Conclusion**

In view of the foregoing, request is made for timely issuance of a notice of allowance.

Respectfully submitted,

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